

Listing of Claims:

1. (original) An uninterruptible power supply device for supplying electrical energy to one of an array of loads having a broad range of power requirements, and for continuing to supply electrical energy to the said one load for a limited period of time in the event of failure of the said one load's main power supply, the uninterruptible power supply device including:

at least one power means for providing electrical energy for the said one load; and

control means, connected to the or each power means and the load, for controlling the device;

wherein:

the or each power means incorporates a plurality of electrical potential energy storage units, each storage unit providing substantially the same electrical potential energy as determined by a potential difference, or a voltage, across the electrical potential energy storage unit; and

the control means is arranged to connect the electrical potential energy storage units according to the power required by the load, the same power means being employable for each one of the array of loads.

2.(original) An uninterruptible power supply device according to Claim 1, wherein the electrical potential energy storage units within the or each power means are connected in parallel by the control means, making the voltage across the or each power means substantially the same as the voltage across the electrical potential energy storage units incorporated within the or each power means.

3.(original) An uninterruptible power supply device according to Claim 1, wherein the electrical potential energy storage units within the or each power means are connected in series by the control means, making the voltage across the or each power means substantially equal to the sum of the voltages across the electrical potential energy storage units incorporated within the or each power means.

4.(currently amended) An uninterruptible power supply device according to Claim 1, wherein a voltage across the control means is determined by the voltage across the or each power means and the uninterruptible power supply device is arranged to provide electrical energy to a different one of the array of loads by altering the voltage across the control means.

5.(original) An uninterruptible power supply device according to Claim 4, wherein the voltage across the control means is suitable for supplying electrical energy to a sub-set of the array of loads, each load within the sub-set having a power requirement up to the power determined by the voltage across the control means.

6.(currently amended) An uninterruptible power supply device according to Claim 4, wherein the uninterruptible power supply device contains a plurality of power means, the voltage across each power means being substantially the same, and the control means connects each one of the plurality of power means in parallel, making the voltage across the control means substantially the same as the voltage across each power means, thereby increasing the limited period of time for which the uninterruptible power supply device is able to supply the said one load in the event of failure of the said one load's main power supply.

7.(currently amended) An uninterruptible power supply device according to Claim 4, wherein the uninterruptible power supply device contains a plurality of power means, the voltage across each power means being substantially the same, and the control means connects each one of the plurality of power means in series, making the voltage across the control means substantially equal to the sum of the voltages across each power means.

8.(currently amended) An uninterruptible power supply device according to Claim 2, wherein the control means incorporates a single electrical potential energy storage unit, which the control means connects in parallel to the or each power means,

making the voltage across the control means substantially the same as the voltage across the single potential energy storage unit.

9.(currently amended) An uninterruptible power supply device according to Claim 1, wherein any connection made by the control means between electrical potential energy storage units, or between power means, is made within the control means.

10.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the or each power means weighs 25 kg or less.

11.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the control means weighs 25 kg or less.

12.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the electrical potential energy storage units are battery packs.

13.(currently amended) An uninterruptible power supply device according to Claim 12, wherein each battery pack is comprised of four 12 V batteries which are connected in series.

14.(currently amended) An uninterruptible power supply device according to Claim 1, further including at least one connecting cable for respectively connecting the control means to the or each power means, the or each connecting cable being connectable to the control means only in a preferred orientation.

15.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the control means is arranged to connect to a further power supply in the event of failure of the said one load's main power supply, such that the voltage across each potential energy storage unit remains substantially unchanged during normal operation of the uninterruptible power supply device.

16.(original) An uninterruptible power supply device according to Claim 15, wherein the main power supply and the further power supply are separate single-phase electricity supplies from the mains supply.

17.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the control means is provided with, and controls, an internal bypass switch which, when closed, causes the electrical energy as supplied by the load's main power supply to be provided directly to the load.

18.(original) An uninterruptible power supply device according to Claim 17, wherein the internal bypass switch is also manually operable by an operator of the uninterruptible power supply device.

19.(original) An uninterruptible power supply device according to Claim 18, wherein the uninterruptible power supply device is connectable to a bypass means, the bypass means being arranged to isolate the uninterruptible power supply device from the load after the internal bypass switch has been closed.

20.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the uninterruptible power supply device is configurable into one of two formats, namely a rack-mount format or a standalone format.

21.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the array of loads have power requirements ranging up to and including 6000 VA.

22.(currently amended) An uninterruptible power supply device according to Claim 1, wherein the control means incorporates a display unit, housed within a receptacle, which is able to adopt a variety of positions within the receptacle.

23.(original) An uninterruptible power supply device according to Claim 22, wherein the display unit incorporates a liquid crystal display screen.

24.(currently amended) An uninterruptible power supply device according to Claim 22, wherein the display unit takes substantially the shape of a cube which is readily removable from, and reinsertable into, the receptacle.

25.(currently amended) An uninterruptible power supply device according to Claim 1, wherein:

the uninterruptible power supply device is configurable into both rack-mount and standalone formats and is formed from a plurality of modular units; and

the modular units are connectable together by bridging indentations of a first size which are formed between the modular units when positioned together in either rack-mount or standalone format.

26.(original) An uninterruptible power supply device according to Claim 25, wherein two oppositely facing panels of each modular unit feature two oppositely facing indentations of a second size at the top and bottom of the panel, the indentations of the second size being substantially half the size of the indentations of the first size.

27.(original) An uninterruptible power supply device according to Claim 26, wherein the indentations of the second size are dual-purpose, being also suitable for use as a receptacle for a foot support to stabilise a modular unit when used in the standalone format.

28.(currently amended) An uninterruptible power supply device for supplying electrical energy to a load, and for continuing to supply electrical energy to the load for a limited period of time in the event of failure of the load's main power supply, the uninterruptible power supply device including:

at least one power means for providing electrical energy for the load; and

control means, connected to the power means and the load, for controlling the device;

wherein the control means incorporates a display unit, housed within a receptacle, which is able to adopt a variety of positions within the receptacle.

29.(cancelled).

30.(cancelled).

31.(cancelled).

32.(cancelled).

33.(cancelled).

34.(cancelled).

35.(cancelled).

36.(cancelled).

37.(cancelled).

38.(new) An uninterruptible power supply device according to Claim 28, wherein the display unit incorporates a liquid crystal display screen.

39.(new) An uninterruptible power supply device according to Claim 28, wherein the display unit takes substantially the shape of a cube which is readily removable from, and reinsertable into, the receptacle.

40.(new) An uninterruptible power supply device for supplying electrical energy to a load, and for continuing to supply electrical energy to the load for a limited period of time in the event of failure of the load's main power supply, wherein:

the uninterruptible power supply device is configurable into both rack-mount and standalone formats and is formed from a plurality of modular units; and

the modular units are connectable together by bridging indentations of a first size which are formed between the modular units when positioned together in either rack-mount or standalone format.

41.(new) An uninterruptible power supply device according to Claim 40, wherein two oppositely facing panels of each modular unit feature two oppositely facing indentations of a second size at the top and bottom of the panel, the indentations of the second size being substantially half the size of the indentations of the first size.

42.(new) An uninterruptible power supply device according to Claim 41, wherein the indentations of the second size are dual-purpose, being also suitable for use as a receptacle for a foot support to stabilise a modular unit when used in the standalone format.

43.(new) An uninterruptible power supply device according to Claim 6, wherein the control means incorporates a single electrical potential energy storage unit, which the control means connects in parallel to the or each power means, making the voltage across the control means substantially the same as the voltage across the single potential energy storage unit.

44.(new) An uninterruptible power supply device according to Claim 8, wherein any connection made by the control means between electrical potential energy storage units, or between power means, is made within the control means.

45.(new) An uninterruptible power supply device according to Claim 8, wherein the control means weighs 25 kg or less.

46.(new) An uninterruptible power supply device according to Claim 8, wherein the electrical potential energy storage unit is a battery pack.

47.(new) An uninterruptible power supply device according to Claim 46, wherein the battery pack is comprised of four 12 V batteries which are connected in series.

48.(new) An uninterruptible power supply device according to Claim 8, wherein the control means is arranged to connect to a further power supply in the event of failure of the said one load's main power supply, such that the voltage across each potential energy storage unit remains substantially unchanged during normal operation of the uninterruptible power supply device.

49.(new) An uninterruptible power supply device according to Claim 8, wherein the control means is provided with, and controls, an internal bypass switch which, when closed, causes the electrical energy as supplied by the load's main power supply to be provided directly to the load.

50.(new) An uninterruptible power supply device according to Claim 8, wherein the uninterruptible power supply device is configurable into one of two formats, namely a rack-mount format or a standalone format.

51.(new) An uninterruptible power supply device according to Claim 8, wherein the array of loads have power requirements ranging up to and including 2000 VA.

52.(new) An uninterruptible power supply device for supplying electrical energy to one of an array of loads having a broad range of power requirements, and for continuing to supply electrical energy to the said one load for a limited period of time in the event of failure of the said one load's main power supply, the uninterruptible power supply device including:

a plurality of electrical potential energy storage units for providing electrical energy for the said one load; and

a potential energy supply facilitator, connected to the plurality of electrical potential energy storage units and the load, for controlling the device;

wherein:

each storage unit provides substantially the same electrical potential energy as determined by a potential difference, or a voltage, across the electrical potential energy storage unit; and

the potential energy supply facilitator is arranged to connect the electrical potential energy storage units according to the power required by the load, the same plurality of potential energy storage units being employable for each one of the array of loads.

53.(new) An uninterruptible power supply device for supplying electrical energy to a load, and for continuing to supply electrical energy to the load for a limited period of time in the event of failure of the load's main power supply, the uninterruptible power supply device including:

a plurality of potential energy storage units for providing electrical energy for the load; and

a potential energy supply facilitator, connected to the plurality of potential energy storage units and the load, for controlling the device;

wherein the potential energy supply facilitator incorporates a display unit, housed within a receptacle, which is able to adopt a variety of positions within the receptacle.

54.(new) All methods of operating the uninterruptible power supply device, and or supplying electrical energy to at least one of an array of loads having a broad range of power requirements, as disclosed in the specification and or described with reference to any of the Figures 1 to 10 of the accompanying drawings.